

## Watershed Based MS4 Permit Sampling and Analysis Plan Development

Albuquerque, New Mexico

### Client

Albuquerque  
Metropolitan Arroyo  
Flood Control Authority  
(AMAFCA)

### Highlights

- ◆ Evaluated water quality sampling methods
- ◆ Performing water quality monitoring

In 2014, the U.S. Environmental Protection Agency issued a new watershed based Municipal Separate Storm Sewer System (MS4) permit for the Middle Rio Grande Basin. Its implementation brings significant changes to stormwater management and reporting requirements to the group of permittees collaborating on stormwater monitoring and infrastructure projects. Permittees are working to modify ordinances, policies, procedures, and stormwater and drainage facilities to ensure compliance with this new permit.



DBS&A hydrogeologists are performing sample collection, storm and precipitation analysis, data analysis, and site and autosampler equipment maintenance.

DBS&A is on a team of consultants contracted by AMAFCA to develop the water quality sampling program for Fiscal Year 2015 under the MS4 permit. The sampling and analysis plan (SAP) aims to meet the anticipated permitting requirements. The work includes evaluating sampling location, constituents, analytical procedures, QA/QC protocol, and reporting requirements.

DBS&A is performing the water quality monitoring portion of the program, which includes monitoring, stormwater sample collection and site and equipment maintenance; data analysis, QA/QC, and reporting. DBS&A is tasked with programming and maintaining ISCO autosampler equipment at nine sampling locations. Sampling activities include:

- ◆ Programming and maintaining ISCO autosamplers to collect composite samples over the duration of the stormwater runoff event
- ◆ Monitoring dedicated velocity meters and associated hydrographs for stormwater runoff events
- ◆ Compositing samples based on the storm event hydrograph to create a flow-weighted composite sample, in compliance with the MS4 permit

